

In Brief

Senate Research Center March 1999

A New Chapter for Texas

The Rule of Capture, Groundwater Conservation Districts, and Sipriano v. Great Spring Waters of America

Providing water to a growing economy and population ranks among the most daunting challenges facing Texas as it enters the 21st century. Water experts urge four major strategies to address the water challenge of the 21st century: conservation, reclamation and reuse, reservoir management, and reallocation of existing supplies. The need to reallocate existing supplies arises from differences in supply and demand in the various parts of the state. In the aftermath of recent legislation — especially Senate Bill 1477 of the 73d Legislature and Senate Bill 1 of the 75th Legislature— conditions exist under which the marketing of water and water rights could become the single most important means of reallocating existing supplies of water. In the wake of such groundbreaking changes in water law, the 76th Legislature continues to face difficult water-related questions, perhaps most significant among them the

future course of ground and surface water marketing. This issue brief is the first of a two-part series that will examine legal restrictions currently impeding the creation of water markets in Texas, what consequences could flow from eliminating such impediments, and what protections could be created to ensure that water-rich and water-poor areas of the state both maintain adequate water supplies.

This brief will address a legal rule with important policy implications: the rule of capture, which currently exists side-by-side, and in tension with, the powers of groundwater conservation districts. The possible modification or elimination of the rule of capture by the Texas Supreme Court in *Sipriano v. Great Spring Waters of America, et al.* could carry profound implications for the emergence of water marketing in Texas. This issue brief will explore the importance of groundwater supplies to an adequate water supply in the future, the rule of capture, the emergence both of stronger groundwater regulation as well as groundwater marketing in recent years, the issues presented to the Texas Supreme Court in *Sipriano*, and legislation currently under consideration that would change groundwater law and the manner in which groundwater can be marketed.



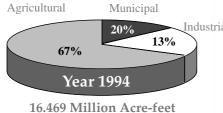
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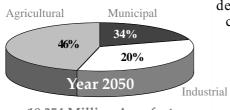
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Water for Texas:

A Consensus-Based Update to the State Water Plan

Total Current and Projected Texas Water Use





18.354 Million Acre-feet

Source: Texas Water Development Board

The Nature of the Problem

As soon as 2010, Texas cities could lack up to 15 percent of their water needs if no new water development were to occur, which would translate into an annual loss to the Texas economy of \$25 to \$40 billion. Even with the development of new water sources, Texas will face the challenge of distributing water efficiently and using it wisely so that dwindling surpluses are put to the best possible use. The Texas Water Development Board

Water Development Board [TWDB] reports that, even if all economically feasible reservoirs are developed and groundwater continues to produce at its average rate of recharge, an additional three to five billion gallons of water per day at most could be produced. This upper ceiling of additional water production will translate into dwindling surplus water supplies. By the year 2040, even assuming the development of

new water sources and conservation savings, the TWDB has predicted that the state's net surplus will drop to approximately 627,000 acre feet annually. [An acre- foot of water represents the amount of water necessary to cover one acre of land with one foot of water, or 325,851 gallons of water]. The strain on existing water supplies is not confined to surface water: the Texas Water Development Board reports that many of the regions that rely on major aguifers around the state have already experienced the mining of groundwater, which means withdrawals

that exceed the rate of recharge, the Edwards Aquifer region being the most conspicuous.

In order to respond to the problem of its dwindling water supply, Texas must develop effective means of addressing differences in water demand based on geography. The Texas Water Development Board predicts that by the 2040's, the amount of water used by industries and

municipalities will exceed the amount used by agriculture. The demand for water in Texas cities will therefore increase more rapidly than in other areas of the state.

The Role of Groundwater

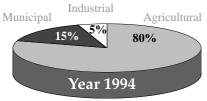
Groundwater is ubiquitous in our state. The Texas Water Development Board reports that nine major and 20 minor aguifers supply water to the state of Texas, and that these major and minor aquifers underlie approximately 81 percent of the state. Moreover, groundwater constitutes a major source of the total water available in Texas. The TWDB's Texas water plan. Water for Texas, issued in August 1997, offers helpful statistics in appreciating groundwater as a major water resource in Texas, reporting that groundwater supplied approximately 9.4 million acre-feet or 57 percent of the 16.5 million acre-feet in total use statewide in 1994.

Aside from the overwhelming significance of groundwater in its own right, the wellbeing of surface water supplies also depends to a large degree on the well-being of groundwater. For example, the San Antonio region of the Edwards Aquifer supplies six downstream river basins that provide water for residents all the way to the Gulf of Mexico. The Guadalupe River basin alone relies on the Edwards Aquifer for 21-32% of its annual flow and supports approximately 80,000 jobs.

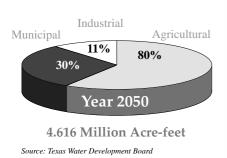
In 1994, more than 80 percent of Texas groundwater was used for agricultural purposes compared to 15 percent for municipal use. By 2050, the TWDB predicts that total groundwater use in Texas will decline by approximately 4.6 million acre feet, and that the share of groundwater used by agriculture will decline to approximately 59 percent of the total; because municipal use will remain relatively constant in acrefeet, its percentage share of the total will more than double by 2050. This shift from agricultural to urban uses of groundwater strongly suggests that groundwater transfers will occur in increasing numbers as we enter the next century.

The question arises whether the rules now in place will be conducive to the optimal use and preservation of Texas groundwater.

Current and Projected Texas Ground Water Use



9.352 Million Acre-feet



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The Rule of Capture The common law rule with regard to

groundwater, called the "rule of capture" or "English Rule," originated in regions with abundant rainfall, before scientific knowledge concerning aquifers had developed, and in the absence of modern population pressures. Texas stands alone among southwestern and western states in retaining the rule of capture, which relies on the fiction that surface and groundwater are independent of one another. Water in a surface stream of sufficient dimension belongs to the people of Texas. By contrast, under the unmodified rule of capture, a landowner was deemed to own any "percolating" water under his or her property, and was free to withdraw it at will. without regard to other groundwater users, as long as he or she used the water beneficially

and did not intentionally waste it.

The Supreme Court explicitly adopted the rule of capture in 1904 in Houston Texas & Central Railway Co. v. East. In East, a railroad company used water drawn from a large, powerful well for commercial purposes on company land physically removed from the well. A neighboring landowner whose well ran dry after the railroad began its commercial use of well water sued for damages, arguing that the use of groundwater should be restricted by a standard of reasonableness. The Texas Supreme Court refused to allow for the recovery of damages, and denied that the use of percolating water, or groundwater, could be restricted by a reasonableness standard.

Despite advances in scientific knowledge of groundwater from 1904 to the 1950's, the Supreme Court in 1955 affirmed the rule of capture and summarized its policy of judicial non-intervention in groundwater use in *City of Corpus Christi v. City of Pleasanton:*

"[p]ercolating waters are regarded as the property of the owner of the surface who may, 'in the absence of malice, intercept, impede, and appropriate such waters while they are on his premises, and make whatever use of them he pleases, regardless of the fact that his use cuts off the flow of such waters to adjoining land, and deprives the adjoining owner of their use.'"



Water bubbles up from the depths of San Felipe Springs and runs out of this chamber, filling the swimming hole in Horseshoe Park. The massive pipes sticking into the springs here supply the City of Del Rio.

Texas decisions contemporaneous with City of Pleasanton explicitly stated that surface water users could only claim damages from excessive groundwater use upstream by presenting clear evidence that the springs arose from an underground stream and contributed directly to the diminution of a river. The burden of proof imposed on the plaintiff who wanted to limit groundwater use

from an underground stream was rigorous, if not insurmountable. In *Denis v. Kickapoo Land Company*, an upstream irrigator had drilled a well through stone adjacent to Kickapoo Creek, just a few feet from the point at which spring waters flowed to the surface and into the creek. The plaintiffs, downstream creek users who lost vast quantities of water for domestic uses as a result of the irrigator's "well," argued that the water had clearly become

a "well-defined and subterranean" channel at the point where the spring flowed into Kickapoo Creek. As a subterranean stream, these waters were subject to state regulation. In 1989 the Austin Court of Appeals, applying East and City of Pleasanton, held that the expert testimony did not unequivocally establish the existence of a well-defined subterranean channel, even though there was no question that the diverted water came from a spring that was a tributary of the creek. As a result, the irrigator's extraction of 700 to 800 gallons per minute from the spring —approximately 576,000 gallons in a 12-hour period, nearly two acre feet-was held to constitute a lawful use of percolating groundwater, and effectively eliminated an entire community's water supply. Kickapoo Land Company made clear to Texas groundwater users policymakers that Texas courts would hold fast to the rule of capture, even when there was a clear opportunity to apply the "subterranean stream" exception.

Despite the extreme reticence of Texas courts to intervene in disputes involving groundwater use, some important exceptions have given rise to precedent for groundwater regulation. In Friendswood Development Company v. Smith-Southwest Industries, Inc., landowners near Houston alleged that their neighbors' excessive pumping had caused property damage through subsidence. Although the Texas

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Supreme Court denied the plaintiffs relief, the court held that, in the future, a landowner whose property suffered subsidence could allege that a neighbor's overpumping had been negligent and constituted a nuisance. Friendswood Development Company was consistent with Beckendorff v. Harris-Galveston Coastal Subsidence District, in which the Texas Supreme Court refused to invalidate the special purpose district that had been created to prevent subsidence due to excessive pumping. Friendswood Development Company emphasized, however, that an exception to the rule of capture existed for subsidence because common law had recognized subsidence as a form of nuisance from which the law protected property owners. Where a plaintiff simply alleged depletion of his or her water supply from a neighbor's excessive pumping, the Friendswood Development Company court affirmed the rule of capture, albeit reluctantly, as an accepted principle of property law in Texas. As late as Barshop v. Medina County Underground Water Conservation District in 1996, when the Texas Supreme Court upheld the facial constitutionality of the Edwards Aquifer Authority legislation that greatly expanded the powers of underground water districts, the court continued to affirm the rule of capture.

The rule of capture is in some sense a misnomer, since, in theory, groundwater belongs to the property owner before its capture. Moreover, the rule of capture is simultaneously a rule of property and of tort law. As a property law principle, it defines groundwater as an attribute of privately owned real estate. The property law aspect of the rule carries important consequences for state regulation. Governments may exercise what is termed the "police power" to protect the public welfare, and rules enacted to save a groundwater supply from overpumping, contamination, and/ or subsidence certainly fall into this category. Texas courts have long held that all property is held subject to the valid exercise of this police power by

state and local government. Nevertheless, because the rule of capture defines groundwater as the property of the individual landowner, regulation to protect groundwater that excessively diminishes the value of property could result in a "taking" of private property, for which the landowner would be entitled to compensation under the Fifth Amendment to the United States Constitution, as well as Article I, §17 of the Texas Constitution. Controversy exists concerning the point at which government groundwater restrictions would so diminish property values as to become a regulatory taking of property.

But the rule of capture is also a principle of tort law: that is, the law that provides compensation for private, civil wrongs. Beginning with East in 1904, the rule of capture has dictated that one landowner may not bring suit against another landowner for depleting or destroying a groundwater supply used in common. In legal terms, the neighbor does not have standing to sue his neighbor to prevent the depletion or destruction of a groundwater supply. Two exceptions created by the courts to this rule —the excessive withdrawal of water from a clearly defined underground stream, or deliberate waste by the defendant landowner — are extremely difficult to prove. Overpumping that results in the subsidence of neighboring property constitutes the third and most meaningful exception to the rule of capture viewed as a tort rule. Outside these narrowly defined exceptions, however, the rule of capture renders one private citizen largely powerless in the courts to prevent another private citizen from endangering a groundwater supply. This aspect of the rule of capture is of critical importance in relation to groundwater marketing, as discussed in a subsequent section.

With both the property and tort law aspects of the rule of capture in mind, it is possible to evaluate whether the rule of capture can sustain the emerging market for groundwater in Texas.

The Emerging Groundwater Market

Given water scarcity, coupled with the proprietary interest in groundwater created by the rule of capture, the market for groundwater is quickly emerging in Texas. One might initially conclude that rule of capture would be conducive to the creation of such a market, since the rule would give an individual maximum freedom to dispose of his or her property interest profitably.

Without question, individual landowners are responding to the heightened demand for groundwater. The Texas Water Development Board and the San Antonio Water System(SAWS) cite the following recent transactions as evidence of the emerging groundwater market:

- In the latter half of 1998, SAWS purchased water rights for up to 550 acre feet per year of Edwards Aquifer groundwater at the price of \$700 per acre foot. Over the same time period, SAWS leased 588 acre feet per year of Edwards Aquifer groundwater at the cost of \$75 acre feet per year for a period of three years. One of the
 - leases included an option to purchase, which added an additional \$10 per acre foot to the price of the lease.
- In February 1999, the SAWS Board authorized three five-year leases totaling 373 acre feet of Edwards Aquifer water for approximately \$80 per acre foot, per year. Negotiations are underway for further leases.
- In 1998 and the early part of 1999, SAWS negotiated an agreement to purchase between 40,000 to 60,000 acre feet per year of groundwater from the Alcoa Corporation to be produced at the Sandow Lignite Mine in Milam and Lee Counties. The contract period is 40 years with a 40-year extension. SAWS agreed to pay

a raw-water charge, either at the time of delivery or at the end of five years, whichever occurs first. This raw water charge will be \$50 per acre foot. SAWS also agreed to pay a management fee starting at \$10,000 per month for the first year, \$15,000 per month for the second year, and \$20,000 for the third year. After the third year, SAWS will pay either \$25,000 per month or 10 percent of the project construction and operating costs, whichever is greater.

- In 1997-1998, SAWS and the San Antonio City Public Service Board (CPS) also negotiated a \$4.5 million contract for the purchase of rights to additional groundwater underlying CPS property in Bastrop and Lee counties. This land could produce as much as 30,000 acre feet of groundwater per year.
- In 1997, the Edwards Aquifer Authority (EAA) initiated an irrigation suspension program under which farmers were paid not to irrigate with Edwards groundwater in exchange for an average price of \$234

per acre. The program, which cost a total of approximately \$2.295 million, freed up groundwater supplies from about 10,000 acres.

- In 1995, the Canadian River Municipal Water Authority (CRMWA), as part of its Conjunctive Use Groundwater Supply Project, agreed to purchase the rights to pump groundwater from a total area of 42,765 acres in eastern Hutchinson county and western Roberts county at a cost of \$14.5 million. The CRMWA will blend the groundwater with water from Lake Meredith to dilute the high chloride content of the lake water.
- In November 1988, the City of Amarillo agreed to purchase between 62,291 and 71,197 acres in Roberts and Hutchinson counties for the right to pump groundwater at a cost of \$305 per acre of land. The total cost will be as much as \$21,715,289.

This list underscores not only the increasing importance of groundwater marketing, but also the diverse ways in which these transactions are being



Comal Springs, New Braunfels, Texas

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structured. Despite the existence of a rapidly expanding groundwater market, however, it is important to recognize that the rule of capture creates problems for the creation of a market that is sustainable and dependable. Professor Ronald Kaiser, J.D., Professor at the Institute for Renewable Resources at Texas A&M University, as well as other water market theorists, identify four characteristics of a property rights system that will result in the efficient allocation of water: First, a water property rights system must provide for the ownership of rights of use that can be assigned to individuals or corporations. Second, such a property rights system must provide exclusivity: the right of the owner to exclude others from the use of the water without the owner's consent. Third, property rights in water must allow for transferability: the right of the water owner to convey part or all of the bundle of rights to another party. Fourth, water property rights must provide enforceability: the right of the owner to protect ownership, exclusivity, and transferability from encroachment or seizure by others.

Water market theorists argue that a groundwater system based upon the rule of capture cannot provide either *exclusivity* or *enforceability*. Absent malicious use, waste, withdrawals from a clearly identifiable underground stream, or subsidence, any landowner may theoretically capture all the water in an aquifer and deprive another landowner of water, as illustrated by the *Kickapoo Land Company* case, in which an individual landowner dried up a community's water supply. As such, water theorists suggest that the rule of capture neither en-

courages water conservation, nor provides certainty or predictability for any groundwater pumper. Nor does the rule provide security for the purchaser of groundwater, since only that amount of water that can be captured can be guaranteed by contract and delivered. If the groundwater available below the seller's property falls below the amount agreed upon in a contract, the seller has no remedy against his neighbor for overpumping. As a result, Kaiser emphasizes, the amount of water that can be marketed is highly variable, which presents a serious problem for purchasers who need to develop an amortization schedule based on a numerically certain quantity of water. The rule of capture can function where water is not scarce: when users do not affect each other's supply, it is unnecessary to expend resources defining and enforcing property rights in water. When water becomes scarce, however, the rule of capture does not encourage limiting water use to available supply or allocate water to the highest valued uses. As a result, many water market theorists argue that a groundwater allocation system should parallel the manner in which Texas now allocating surface water rights. After being adjudicated, groundwater usage rights would be transferable subject to the restrictions spelled out in the Water Code.

In addition to the shortcomings of the rule of capture in creating an efficient groundwater market, the rule also fails to safeguard groundwater supplies from the dangers to which all common-pool resources are vulnerable. Case studies demonstrate that, where a number of users have access to a common natural resource like an aquifer, the total number of units withdrawn will exceed the economically optimal level of withdrawal. Under the rule of capture, the individual users of a common-pool resource have no incentive to reduce pumping without knowing that the other users will also do so. Individually, the rational strategy with regard to the resource is to maximize the amount of water withdrawn. Collectively, this strategy leads to an irrational outcome, however, because it induces all users to exhaust the resource, resulting in the so-called "tragedy of the commons." The larger a common-pool resource and the more diverse its users become, the greater the tendency for this irrational result. In the context of Texas groundwater, this means that large aquifers serving populations of diverse users are at the greatest risk. Elinor Ostrom, Professor of Political Science at the



Swimming Hole at Barton Springs, Austin, Texas

University of Indiana, has documented the manner in which aquifers in California have been exhausted by collectively irrational behavior. In *Governing the Commons: the Evolution of Institutions for Common Action*, Professor Ostrom describes one such aquifer that was overpumped until the blackish water beyond the "bad water line" invaded the rest of the aquifer, an oft-cited risk inherent in overpumping from the Edwards Aquifer.

Professor Ostrom also suggests, however, that aquifer users can disrupt counterproductive rules of use and can replace them with agreed-upon rules that have the potential of preventing the destruction of common pool resources like aquifers. Texas policy makers have recognized that the rule of capture, standing alone, fails to provide either a dependable rule upon which a groundwater market can be built, or a way of preventing groundwater resources from being overused or even exhausted. Alongside the rule of capture, Texas has developed a system of groundwater regulation based on local districts.

The Emerging Regulation of Texas Groundwater

The 1904 East decision and its progeny have consistently stated the legislature could regulate groundwater if it chose to do so. In 1949 the Texas Legislature passed the Texas Groundwater Act, which represented a half measure: groundwater districts could be formed to regulate withdrawals to the extent that such controls did not divest landowners of their ownership of groundwater. The legislature attempted to retain the rule of capture while enabling local groundwater authorities to be created. The purposes of such local districts would include preventing the depletion of the water table, preventing the loss of artesian pressure, preventing waste, and, later, preventing subsidence. The districts could regulate the spacing of wells and the rate of water use to achieve these Prior to the groundwater legislation of the 1990's, however, the powers actually conferred upon groundwater districts to achieve their declared purposes were limited, and to a large extent remained unexercised, as water law expert Professor Corwin Johnson has observed.

In response to the increasingly urgent need for meaningful groundwater regulation, the 74th Legislature significantly revised and expanded the powers available to groundwater conservation districts; these changes were codified as Chapters 35 and 36 of the Water Code. In June 1996, in *Barshop v. Medina County Underground Water Conservation District*, the Texas Supreme Court upheld the facial constitutionality of the legislation that created the Edwards Aquifer Authority, S.B. 1477, and thereby gave constitutional approval to more extensive forms of groundwater regulation than any Texas court in history. The court emphasized, however, that individual landowners could bring takings challenges to

specific actions taken by a groundwater conservation district. Senate Bill 1, passed by the 75th Legislature, further revised Chapters 35 and 36 of the Water Code by expanding the powers available to regulate groundwater on the local level while integrating local groundwater districts into statewide water planning.

Taken together, the powers of the Edwards Aquifer Authority that were confirmed by the Texas Supreme Court in *Barshop*, as well as the changes to Chapters 35 and 36 enacted by the 74th and 75th Legislatures, have created a far more conducive environment for regulating groundwater than has ever existed in Texas.

Groundwater Management Area

Chapter 35 of the Water Code provides for the creation of groundwater management areas to conserve, preserve, protect, recharge, and prevent waste of groundwater reservoirs, and to control subsidence caused by the withdrawal of groundwater, consistent with Article XVI, §59 of the Texas Constitution. Local residents concerned about the health of a groundwater supply can petition to TNRCC for the creation of a groundwater management area. Moreover, TNRCC's executive director and executive administrator are required to meet at least once a year to identify areas of the state that are expected to experience "critical groundwater problems" within the next 25 years, including shortages of surface water or groundwater, land subsidence resulting from groundwater withdrawal, and contamination of groundwater supplies. Based on this annual study of the state's groundwater, TNRCC should designate priority groundwater management areas and also recommend areas to be considered for the hearing process that can result in the creation of groundwater conservation districts under Chapter 36. Further, TNRCC can issue an order declaring that a groundwater conservation district should be created within a groundwater management area. Once this order issues from the TNRCC, the landowners in the area may petition to create one or more districts, have the area annexed to a district that already exists and adjoins the area, or seek to create a district through the legislative process.

Finally, Chapter 35 requires TNRCC and the TWDB to issue a comprehensive report no later than January 31, 1999 to the governor, the lieutenant governor, and the speaker of the house regarding activities relating to the creation of groundwater management areas (GWM areas) and groundwater conservation districts. The current report is available from TNRCC and provides valuable information on these issues.

Between 1987 and 1991, TNRCC evaluated sixteen areas for the potential creation of priority groundwater management areas, completed fourteen of the studies, and designated four priority groundwater management areas: Reagan, Upland, and

Midland Counties; Briscoe, Swisher, and Hale Counties; Dallam County; and a Hill Country management area. The TNRCC concluded that GWM areas should not be created in five other areas but that groundwater monitoring for a period of five years should nevertheless be conducted in those areas to assess the severity of groundwater problems there: Williamson County and adjacent areas; Waco and adjacent areas; the "East Texas Area;" the "Trans-Pecos Area;" and the "North-Central Texas Area."

Of the sixteen studies originally undertaken, the fifteenth and sixteenth were ultimately completed in August 1998: the North Texas Alluvium and Paleozoic Outcrop Area, which was determined not to be a priority groundwater management area, and the El Paso County Area, which TNRCC designated as a PGMA on December 2, 1998.

Groundwater Conservation Districts

The groundwater management areas created under Chapter 35 provide a vehicle by which TNRCC, the TWDB, and local communities can assess local groundwater sources and decide whether regulation is necessary. By contrast, groundwater conservation districts, created under Chapter 36 of the Water Code, possess a broad range of concrete powers to protect groundwater on the local level. For example, groundwater management districts can pass and enforce rules to provide the most efficient use of groundwater, to prevent the waste of groundwater, and to prevent subsidence. Groundwater districts have well permitting authority that allows them to consider the effect of new wells on existing surface and groundwater uses, as well as types of proposed usage. Districts can penalize well owners who violate their permit, or operate without one. A further measure created by §36.119 directly addresses a gap created by the rule of capture: whereas the rule of capture prevents a neighboring landowner from suing his neighbor for overpumping, §36.119 enables a neighbor to sue an adjoining landowner for violating the terms of his or her permit.

Although the restrictions on pumpage available to a groundwater district under Chapter 36 may appear to repeal certain aspects of the rule of capture, it is important to note that §36.002 carefully *affirms* the rule of capture, *subject to* the regulatory powers available to the districts:

The ownership and rights of owners of the land and their lessees and assigns in groundwater are hereby recognized, and nothing in this code shall be construed as depriving or divesting the owners or their lessees and assigns of the ownership or rights, *subject to rules promulgated by the district*.

(Emphasis added). Section 36.105 confers upon groundwater control districts the power of eminent domain "to acquire by

condemnation a fee simple or other interest in property if that property interest is necessary to the exercise of the authority conferred by this chapter." In theory, at least, a groundwater district would be empowered to compensate a landowner who claimed that restrictions on groundwater use had become so extensive as to constitute a regulatory taking of property.

Other provisions of Chapter 36 are of special relevance to groundwater marketing. Pursuant to §36.104, groundwater districts "[m]ay purchase, sell, transport, and distribute surface water or groundwater for any purpose." Individual property owners may also contract to buy and sell groundwater outside of the district, subject to the approval of the groundwater control district under § 36.122. The factors a groundwater district must take into account before approving a sale of groundwater outside the district echo the considerations required for the TNRCC to approve an interbasin transfer of surface water under §11.085 of the Water Code. These include:

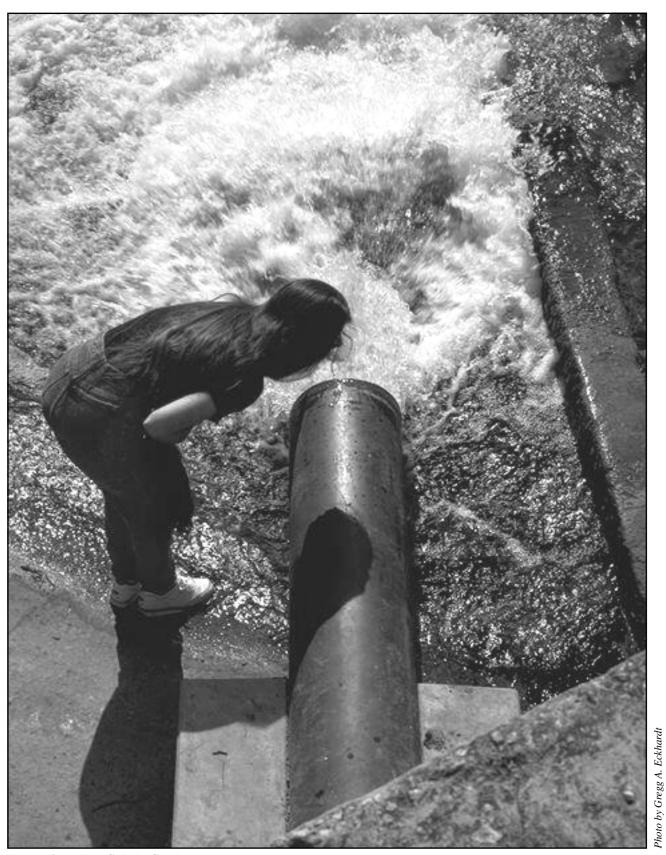
- the availability of water in the district and in the proposed receiving area during the period for which the water supply is requested;
- the availability of feasible and practical alternative supplies to the applicant; the amount and purpose of the use in the proposed receiving area for which water is needed; and,
- the projected effect of the proposed transfer on aquifer conditions, depletion, subsidence, or effects on existing permit holders or other groundwater users within the district.

If the district approves the application for an out-of-district transfer, the district must specify the amount of water that may be transferred out of the district, and the period for which the water may be transferred.

Chapter 36 of the Water Code confers upon groundwater districts powers which, if properly exercised, have the potential to mitigate possible consequences encouraged by the rule of capture: overpumping, subsidence, or contamination, and to require landowners to respect each other's use of a common groundwater source. Moreover, by conferring upon the residents of a groundwater district the right to bring suit against a neighbor who violates the terms of a pumping permit, Chapter 36 provides a statutory means of controlling one's own water supply from excessive pumping.

Finally, because Chapter 36 makes transfers of groundwater outside the district possible, and simultaneously requires the district to consider the continued welfare of the groundwater source, it creates many of the conditions necessary for the development of rational groundwater marketing.

Texans currently face an anomalous situation: if one lives inside a groundwater conservation district, a regulatory



Farmer's well on Salado Creek

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framework exists to protect one's groundwater interests and to regulate groundwater marketing. If one lives outside of a groundwater conservation district, the rule of capture governs one's interests in groundwater, with very few other protections. The proliferation of groundwater districts across Texas therefore comes as no surprise: the 75th Legislature in 1997 created 8 such districts, of which five were subsequently confirmed by local election. In sum, 44 groundwater districts currently exist throughout the state that regulate water withdrawn from a great number of Texas' nine major and 20 minor aquifers.

At present, nine bills have been introduced in the 76th Legislature that would create new groundwater conservation districts across the state. In the Big Bend region, Representative Gallego has introduced H.B. 1233 and H.B. 2391, which would respectively create groundwater conservation districts in Brewster and Presidio Counties, and Representative Walker has sponsored H.B. 576, which would create the Trans-Pecos Groundwater Conservation District. In the Hill Country, Representative Hilderbran has introduced H.B. 847, which would create the Blanco County Conservation District. In the Panhandle, Representative

Chisum has introduced H.B. 2199, which would create the Ground Water Conservation District Number Three. Senator Ogden has introduced S.B. 635 to create the Robertson-Brazos County Groundwater Conservation District. Senator Armbrister has introduced S.B. 943 to create the Jackson County Groundwater Conservation District, and S.B. 944 to create the Bastrop-Lee Groundwater Conservation District. Finally, Senator Lindsay has introduced S.B. 700 to create the North Harris County Regional Water Authority, the functions of which would include groundwater regulation.

A more controversial proposal has also been introduced in the 76th Legislature that would restrict the options available to parties seeking to buy or sell groundwater. In H.B. 109, Representative Alvarado has proposed to amend Chapter 5A of the Property Code to prohibit the severance of surface rights from groundwater rights in conveying real property with the following language:

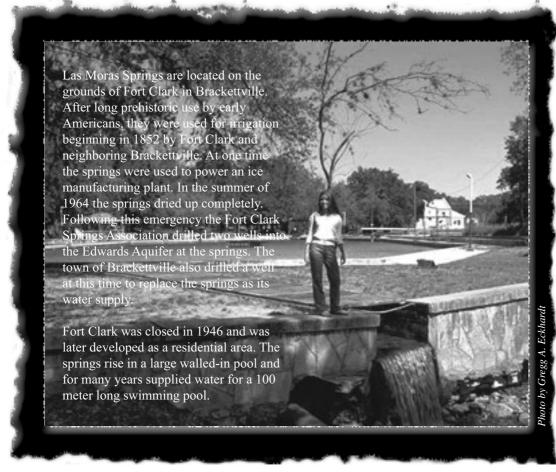
Section 5.012: SEVERANCE OF SURFACE RIGHTS FROM GROUNDWATER RIGHTS PROHIBITED.

In conveying real property, the owner of the property may not sever surface rights from groundwater rights. The owner

may not:

- (1) retain surface rights and convey groundwater rights to the real property; or
- (2) retain groundwater rights and convey surface rights to the real property.

Presumably, H.B. 109 seeks to address the concerns of rural property owners with groundwater wells significant enough to make their land valuable to potential urban buyers. H.B. 109 would significantly restrict the manner in which such transactions could be structured. For example, the San Antonio Water Service-Alcoa transaction already discussed would become more difficult or even impossible, since this transaction involves groundwater rights in Milam and Lee Counties without the accompanying surface property. Another possible means of addressing the concerns of rural landowners could be to strengthen



Swimming Pool at Las Moras Spring

the protections for the groundwater source of origin outlined in § 36.122 of the Water Code.

This issue brief has suggested that the powers of groundwater conservation districts exist in tension with the common law rule of capture. A case argued in October 1998 before the Texas Supreme Court, *Sipriano v. Great Spring Waters of America, et al.*, challenges the rule of capture itself, and carries

with it potentially far-reaching consequences for Texas groundwater regulation.



A Groundbreaking Groundwater Decision?

The facts involved in Sipriano v. Great Spring Waters of America, et al. are strikingly similar to those of the original East decision in 1904. The Ozarka company leases land in Henderson County just above the Roher Spring near Athens, Texas, where it pumps approximately 90,000 gallons of groundwater each day, or approximately 100 acre feet per year, to supply a booming bottled mineral water business. Plaintiffs are landowners adjacent to the Ozarka property who have alleged that Ozarka's pumping practices drastically drained their domestic water wells. Plaintiffs filed suit based on the tort theories of nuisance and negligence. The plaintiffs sought injunctive relief against Ozarka, as well as damages. As the earlier discussion of the rule of capture makes clear, however, Texas courts have consistently refused to acknowledge such claims absent deliberate waste, an underground stream, or subsidence, and the Sipriano plaintiffs claimed none of these exceptions. Instead, in order to recover on their theories of nuisance and negligence, the plaintiffs also requested something far more fundamental: that the court abolish the rule of capture in favor of a rule observed by many other states: the rule of reasonable use, which allows a suit against a neighbor for excessive pumpage that impairs the available groundwater supply.

A plaintiff who asks a district court to overturn a legal doctrine consistently affirmed by the Texas Supreme Court for 100 years rarely meets with immediate success. Not surprisingly, the district court granted summary judgment in favor of Ozarka on the basis of the rule of capture, and the court of appeals affirmed. In the aftermath of its 1996 decision in

Barshop, which upheld the constitutionality of the statute that created the Edwards Aquifer Authority, the Texas Supreme Court agreed to hear the plaintiffs' appeal.

Among the arguments on Sipriano's side of the issue before the Supreme Court were: (1) that the rule making legal precedent binding on a court had limits, so that a doctrine could be reversed if it no longer served a useful function and was even counterproductive to the state; (2) the rule of capture undermined both the effective regulation of groundwater in Texas, and the legal protection of individual interests in groundwater through tort law; and, (3) that the rule of capture was a rule adopted and enforced by Texas courts, and as such should be abolished by Texas courts. Ozarka responded that: (1) legal precedent precluded reversing the district court; (2) the rule of capture existed in tandem with local groundwater regulation, and did not undermine it; (3) reversing the rule of capture would disrupt a vested property right and result in a massive "taking" of property statewide; and, (4) even if the rule of capture were counterproductive to state water policy, the legislature had "occupied the field" of groundwater regulation, and any change in the rules governing groundwater should therefore originate in the legislative rather than the judicial branch of government.

If the Texas Supreme Court were to abolish the rule of capture outright, it would effectively eliminate an entire category of valuable property now owned by Texas landowners. However, since the facts in *Sipriano* only implicate the rule of capture as it precludes one landowner from overpumping by an adjacent landowner, it may be possible for the court to modify the rule without completely abolishing ownership of groundwater.

The disagreement in Sipriano concerning which branch of government should undo the rule of capture points to an interesting problem. The Texas Legislature has enacted into law declarations such as the one found in §36.002 of the Water Code, which acknowledges the rule of capture, *subject to* the regulatory powers available to the districts. The Supreme Court, on the other hand, has upheld the constitutionality of extensive groundwater regulations that are difficult to reconcile with the rule of capture; nevertheless the court explicitly affirmed the rule of capture in its 1996 Barshop decision. While passing or approving measures that fill the regulatory gap created by the rule of capture, both branches of government have nevertheless deferred to the rule of capture. The outcome of Sipriano will indicate whether the expanded regulation of Texas groundwater in the last few years has created a climate in which the rule of capture is no longer sacrosanct.

—Christopher Brown, SRC



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